

FRANTI, A.; PETTIGE, E.; TURAY, I.

Influence of thioglycolic acid on the metabolism of yeast cells.

P. h. (BIOLOGIAT KOZLEMENYESK) Budapest. Vol. 5 No. 1, 1957.

SO: Monthly Index of East European Accessions (ALEI) Vol. 6, No. 11 November 1957.

SEBEK, Vaclav, Doc.; KRAMINEROVA, Cecilie

Considerations on the present state of contraception. Cesak. gyn.  
24[38] no.8:666-668 0 '59.

1. Antikoncepcni poradna gyn.-por. odd. nemocnice v Motole, prednosta  
doc. V. Sebek.  
(CONTRACEPTION)

OSEL, V., red.; BELOV, V., red.; GALKIN, S., red.; KRAMINOV, A.,  
red.; SMIRNOV, K., red.; SHOSTAKOVSKIJ, V., red.; SIMEKOVA, N.,  
red.

[Virgin-land planet] Planeta TSelina. Moskva, Molodaia  
gvardiia, 1965. 157 p. (MIRA 18:4)

KRAMINOV, Daniil Fedorovich; KOROTKOV, Yu., redaktor; BOBROV, A., tekhnicheskiy redaktor.

[Encounters in America; sketches] Amerikanskie vstrechi; ocherki.  
[Moskva] Izd-vo TsK Vsesm "Molodaia gvardiia," 1954. 279 p.  
[Microfilm] (MLRA 8:2)  
(United States--Description and travel)

KRAMINOV, D. F.

KRAMINOV, D. F.

In double chains. Sov. profsoiuzy 2 no.6:74-83 Je '54. (MIRA 7:?)  
(United States--Trade unions) (Trade unions--United States)

KRAMINOV, Danil Fedorovich; SEREBRYANNIKOV, P., redaktor; KIRILLINA, L.,  
tekhnicheskiy redaktor

[Through India; travel notes and sketches] Po Indii; putevye ocherki  
i zarisovki. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia," 1956.  
(MLRA 9:11)  
230 p.  
(India--Description and travel)

KRAMINOV, Daniil Fedorovich; SEMKUNOV, N., redaktor

[In England; a journalist's notebook] V Anglii; zapiski zhurnalista.  
Moskva, Izd-vo "Pravda," 1957. 47 p. (Biblioteka "Ogonek," no.32)  
(Great Britain--Description and travel) (MLRA 10:7)

KRAMINOV, Daniil Fedorovich; KISSELEV, Ya., redaktor; MOROZOVA, G..  
tekhnicheskiy redaktor

[On five continents; a journalist's notebook] V piati chastiakh  
sveta; zapiski zhurnalistika. [Moskva] Izd-vo TsK VLKSM "Molodaia  
gvardiia," 1957. 350 p.  
(Voyages and travel)

KRAMINOV, D.

"Through India; travel notes and sketches" by D. Kraminov. Book  
review. Geog. v shkole 20 no.3:79 My-Je '57. (MIRA 10:6)  
(India--Description and travel)

TIMOKHIN, N.A.; BARINOV, I.G.; KRANNOVA, K.G.

Interfactory school for studying the chrome-emulsion tanning  
method. Kozh.-obuv.prom. 3 no.8:15-16 Ag '61. (MIRA 14:10)  
(Tanning)

KALMYKOVA, A.D.; KRAMINSKAYA, N.N.; VASILENKO, O.G.

Hemolysis reaction in hemorrhagic nephrosonephritis. Vop.  
virus. 7 no.6:729-731 N-D '62. (MIRA 16:4)

1. Khabarovskaya protivochumnaya stantsiya i Irkutskiy  
protivochumnyy institut.  
(KIDNEYS—DISEASES) (HEMOLYSIS AND HEMOLYSINS)

KRAMINSKAYA, N. N.

"A Serological Type of Leptospira Isolated From an Eastern Field Mouse," by N. N. Kraminskaya, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, Vol 27, No 91, Sep 56, pp 54-57

On the basis of research conducted in the period 1950-51, it was established that the "Eastern" *Microtus* carried a serological type of *Leptospira* which was named P-183. The pathogen isolated from various organs and the urine of these rodents was found to be virulent to guinea pigs. Clinical symptoms of the resultant diseases in guinea pigs are described in detail. A graph shows a temperature curve of an experimentally infected guinea pig. Two tables are included to show cross hemagglutination and lysis reaction of strains akiyami B, P-183 and DV-P; and the reaction of agglutination and lysis of *Leptospira* P-183 and akiyami B with exhausted sera. It was concluded on the basis of these results that strain P-183 isolated from *Microtus fortis pellicens* Thomas was related in antigenic structure to *L. akiyami* B, and was homologous to the Titov strain (Nero type) of *Leptospira*. It was serologically established that strain P-183 had definite epidemiological and epizootological significance with regard to leptospiroses in the Far East.

Sum 1258

KRAMINSKAYA, N. N. and EKSIN, V. A.

"Spontaneous Leptospirosis in White Mice," by N. N. Kraminskaya and V. A. Eksin, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, Vol 27, No 9, Sep 56, pp 63-64

This article describes the investigation of Leptospira observed in the urine of white mice obtained from mouse-breeding houses for 1955 experiments on the etiology of Far Eastern leptospiroses. The presence of these pathogens was considered to be a highly significant observation in view of the fact that spontaneous leptospirosis in white mice has not heretofore been mentioned in Soviet literature and laboratory manuals.

On examination of exudate from the abdominal cavities of guinea pigs which had been experimentally infected with kidney emulsions prepared from white mice found to be carrying the disease, Leptospira were observed by direct and dark-field microscopy.

Two cultures of Leptospira isolated from the infected guinea pigs were found to be identical and grew well on a yeast medium. On the basis of the results of serological studies of these cultures, it was concluded that the strains isolated were a new serological type, which was named Leptospira muris. Further experiments are recommended to determine the epidemiological significance of this pathogen.

Sum 125 8

ESKIN, V.A.; KRAMINSKAYA, N.N.; BERKUT, Yu. V.; IRLIN, Sh. P.; IZOTOV, P.V.

Epidemiology and clinical characteristics of Ussuri leptospirosis.  
Zhur. mikrobiol. epid. i immun. 29 no.8:54-60 Ag '58. (MIRA 11:10)  
(LEPTOSPIROSIS,  
ussuri, epidemiol. in Russia & clin. aspects (Rus))

KAMINSKII, V. N.

"Leptospirosis in the far east of the USSR," p. 151

Deyateliye Soveshchaniye po parazitologicheskim problemam i  
epidemiologicheskym bol'znyam. 22-29 Oktyabrya 1959 g. (Tenth Conference  
on Parasitological Problems and Diseases with Natural Focus 22-29  
October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences  
USSR and Academy of Sciences USSR, No. 1 254pp.

Antiplague Inst. of Siberia and the Far East/Irkutsk

KRAMINSKAYA, N.U.; ESKIN, V.A.

Spontaneous carrying of Leptospira in white laboratory mice in the  
Far East. Soob.DVFAN SSSR no.11:157-159 '59. (MIRA 13:11)

1. 73-ya virusologicheskaya laboratoriya Dal'nevostochnoy oblasti.  
(Soviet Far East--Leptospira)

ESKIN, V.A.; KR-MINSKAYA, N.N.; IZOTOV, P.V.; SOLDATOV, G.M.

Leptospirosis in muskrats in the Maritime Territory. Soob.DVFAK  
SSSR no.11:159-161 '59. (MIRA 13:11)

1.73-ya virusologicheskaya laboratoriya Dal'nevostochnoy oblasti.  
(Maritime Territory--Muskrats--Diseases and pests)  
(Leptospira)

KRAMINSKAYA, N.N.

Results of a study of Far Eastern strains of new serotypes of  
pathogenic leptospiros. Zhur.mikrobiol.epid. i immun. 30  
no.3:54-58 Mr '59. (MIRA 12:5)  
(LEPTOSPIRA,

pathogenic serotypes isolated in Far East (Rus))

KRAMINSKAYA, N.N. (g Ussuriysk); ESKIN, V.A. (g.Ussuriysk); ZHUK, N.F.  
(g.Ussuriysk)

Etiology of periodic ophthalmia in horses. Veterinariia 36  
no.12:13-17 D '59.  
(Horses--Diseases) (MIRA 13:3)

KRAMINSKAYA, N.N.

Leptospiroses in domestic animals in Irkutsk Province.  
Trudy Irk. NIIEM no. 7:150-160 '62 (MIRA 19:1)

1. Iz Irkutskogo protivochumnogo instituta Ministerstva  
zdravookhraneniya SSSR.

ANTIPLAGUE, V. A.

"Virologists in the Far East," p. 167

Desyatoe sognaniye po parazitologii i virologii v chernobyl'skom polozhenii. 22-23 oktyabrya 1986 g. / with "Report on Parasitological Problems and Diseases with Reference to 22-23 October 1986", Moscow-Leningrad, 1989, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1, 291 pp.

Antiplague Inst. of Siberia and the Far East /Irktuk

KRAMINSKIY, V.A.

History of cholera epidemics in China. Izv. Irk. gos. nauch.-issl.  
protivochum. inst. 21:3-18 '59. (MIRA 14:1)  
(CHINA--CHOLERA, ASIATIC)

NIKOLAYEV, N.I., otv. red.; LENSKAYA, G.N., zam. otv. red.; PASTUKHOV,  
B.N., zam. otv. red.; FENYUK, B.K., zam. otv. red.; ISHUNINA, T.I.,  
red.; AKIYEV, A.K., red.; DOMARADSKIY, I.V., red.; DROZHDEVKINA,  
M.S., red.; ZHOVTYY, I.F., red.; KOROBKOVA, Ye.I., red.;  
KRAMINSKIY, V.A., red.; KRATINOV, A.G., red.; LEVI, M.I., red.;  
LOBANOV, V.N., red.; MIRONOV, N.P., red.; PETROV, V.S., red.;  
PLANKINA, Z.A., red.; PYPINA, I.M., red.; SMIRNOV, S.M., red.;  
TER-VARTANOV, V.N., red.; TIFLOV, V.Ye., red.; FEDOROV, V.N.,  
red.; PARNE, Ya.A., red.; PRONINA, N.D., tekhn. red.

[Especially dangerous natural focus infections] Osobo opasnye i  
prirodnoochagovye infektsii; sbornik nauchnykh rabot protivo-  
chumnykh uchrezhdenii. Moskva, Medgiz, 1962. 271 p.

(MIRA 16:5)

(COMMUNICABLE DISEASES)

Kramisheva, N.V.

USSR/General Biology - Individual Development.

B-4

Abs Jour : Ref Zhur - Biol., No 4, 1956, 14369

Author : Kramisheva, N.V.

Inst : -

Title : Development of Retina in Groundling.

Orig Pub : Dokl. AN SSSR, 1956, 109, No 6, 1219-1221

Abstract : The development of eye retina of groundlings is described. At the hatching stage the retina basically is formed by large weakly differentiated cells of spindle-like form, which reproduce by mitosis. Accumulation of melanin in the pigment epithelium begins soon after hatching, which coincides with advent of blood to the eye. Before transition to active nutrition, layers of retina are formed. In the layer of optical cells the number of cones exceeds the number of rods about tenfold. In pigment epithelium cells offshoots appear. With the beginning of active nutrition (on the 9th-11th day) the length of offshoots in

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USSR/General Biology - Individual Development.

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B-4

Abs Jour : Ref Zhur - Biol., No 4, 1956, 14369

the optical and pigment cells is increased. During the first month of development formation of all retinal layers, pigment epithelium and other parts of the eye takes place; however, a clear reaction to light appears only at the end of the second month.

Card 2/2

KRAMKOVA, N.I., TSVETKOV, V.S., ABELEV, G.I., POSTNIKOVA Z.A. (USSR)

"Isolation of the Specific Antigens of Neoplastic and Normal Tissues by  
Methods of Preparatory Immunoelectrophoresis and Immunofiltration"

Report presented at the 5th Int'l Biochemistry Congress,  
Moscow, 10-16 Aug. 1961

CZECHOSLOVAKIA

VECEREK, B.; KRAML, J.; PELICOVA, H.; STEPAN, J.; CHMELAR, M.;  
STIPEK, S.

1. Institute for Medical and Forensic Chemistry, Faculty  
of General Medicine, Karlovy University, Prague - (for all).

Prague, Collection of Czechoslovak Chemical Communications,  
No 11, November 1965, pp 3964-3968.

"Phosphatases. Part 2: Changes in the composition of human  
intestinal and kidney alkaline phosphatase during purifi-  
cation."

( 6 )

PROKES, Jaroslav; MIKETUKOVA, Vera; KRAML, Jiri

Detection of a new peroral antidiabetic chlorpropamide (P-607)  
in the blood serum.

1. Laborator pro toxikologii a soudni chemii a I. ustav pro chemii  
lekarskou University Karlovy v Praze, prednosta prof.dr. Karel Kacl.  
(ANTIDIABETICS blood)

KRAML, J.

Insulin antibodies and nonspecific interaction between insulin  
and serum proteins. Cesk. fysiol. 14 no.3:205-232 My'65.

1. I. ustanov pro chemii lekarskou a soudni fakulty vseobecneho  
lekarstvi Karlovy University, Praha.

KRAML, J.; PROKES, L.; PELICOVA, Daniel; CHMELAR, M.; KAPL, K.

The immunological properties of the IgG fraction isolated from the blood  
with human  $\alpha_2$ -macroglobulin in normal and during pregnancy state.  
(Praga) 9 no. 2821-194 - M. 1974.

Institute Department of Medicine and Pathology, Faculty of Medicine,  
University, Prague.

\*

PELICOVA, Irena; KRAML, J.; CIMEKAR, M.; VECEREK, B.

Precipitating and binding antibodies against human intestinal  
alkaline phosphatase. Folia biol. (Praha) 11 no. 3:208-214 '65

1. First Department of Medical and Forensic Chemistry, Faculty  
of General Medicine, Charles University, Prague.

KRAML, Jiri; PROKES, Jaroslav; KACL, Karel; PELICOVA, Iana; FOIT,  
Richard, SIEBEROVA, Ruzena; KOLAR, Miroslav

Use of labelled insulin for detection of insulin antibodies. I.  
Detection of insulin antibodies with electrophoresis in agar.  
Vnitri lek. 11 no.1-17 Ja '65

I. I. ustav pro chemii lekarskou a soudni FVL UK (prednosta  
prof. dr. Karel Kacl, DrSc.,); II. vnitri klinika FDL UK  
Fakultni nemocnice Pod Petrinem (prednosta: prof. dr. Richard  
Foit, DrSc.) a Biofysikalni ustav FVL UK (prednosta - doc. dr.  
Zdenek Dienstbier, DrSc.).

L 21473-66

ACC NR: AP6011982

SOURCE CODE: CZ/0057/65/000/007/0287/0292

AUTHOR: Kraml, Vaclav (Engineer)

ORG: Bila Cerkev Iron Works, Hradek u Rokycan (Zelezarny Bila Cerkev)

TITLE: Intensification of coal-gas production by oxygen

SOURCE: Hutnik, no. 7, 1965, 287-292

TOPIC TAGS: manufactured gas, oxygen, carbon monoxide, hydrogen, nitrogen, methane, furnace

ABSTRACT: Normal coal gas resulting from air gasification contains 54% by volume of nitrogen. The use of oxygen allows a drastic reduction in nitrogen content. The importance of the combustion temperature is explained. The use of oxygen in coal gas production, apart from reducing the N<sub>2</sub> content, increases the decomposition of steam and thereby the formation of CO and H<sub>2</sub>, and allows a higher amount of steam to be used in the reaction. The content of CH<sub>4</sub> does not change; the calorific value of the gas increases. Practical experience showed an increase in the calorific value of the gas from 1,445 to 1,569 kcal/m<sup>3</sup> at STP (representing an increase of 8.5%); the furnace capacity increased with the better gas quality from 5.24 tons/hr to 5.40 tons/hr (representing an increase of 3%). Orig. art. has: 7 figures and 4 tables. [JPRS]

SUB CODE: 13 / SUBM DATE: none / OTH REF: 003

Card 1/1dta

40

B

2

KRIMI, A. I. VOROB'Yeva, L. I.

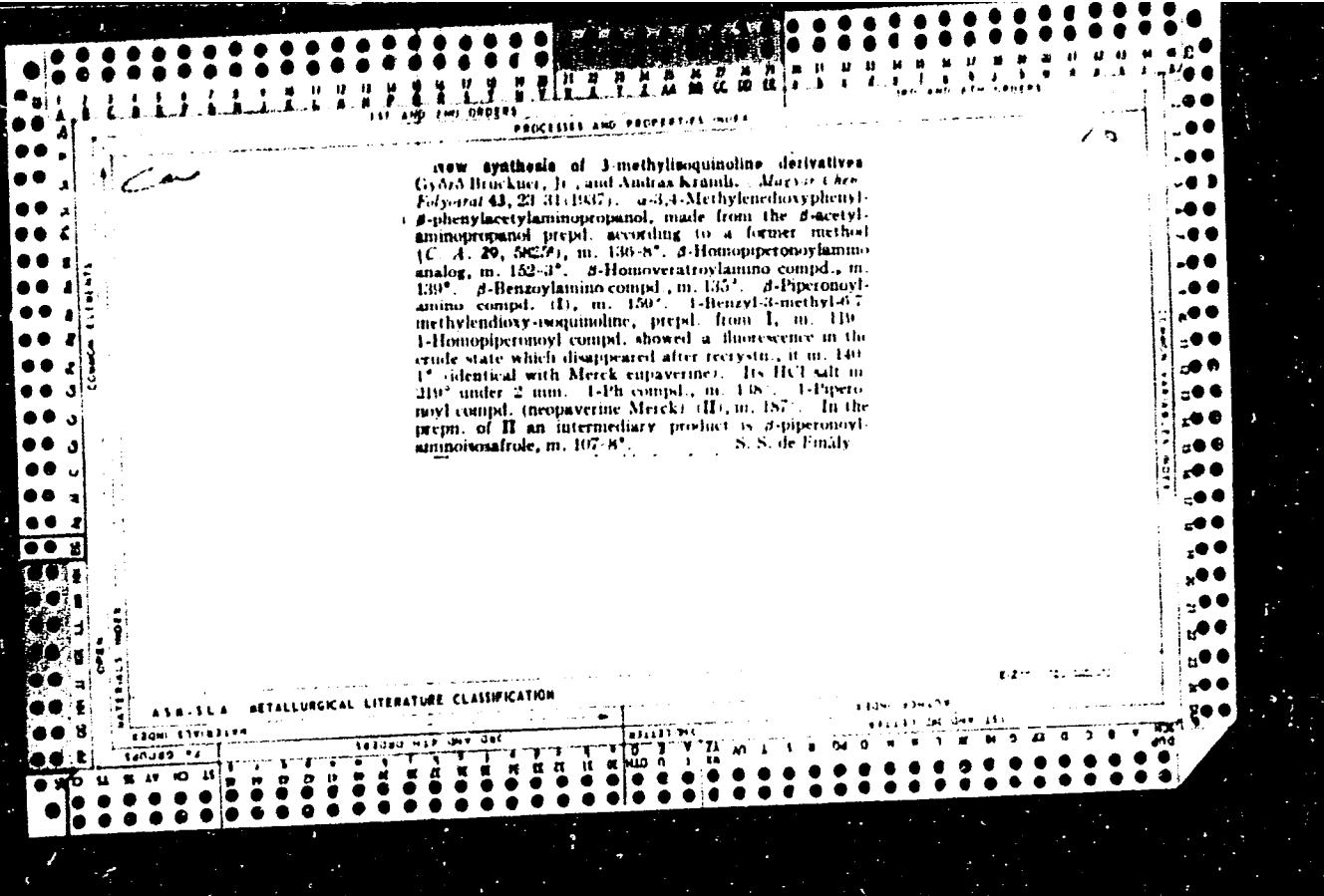
Effect of oxidation-reduction conditions on the formation of vitamin  
B<sub>12</sub> by propionic acid bacteria. Mikrobiologiya 34, No. 2, MCR-414  
My-Je 'et. (MFA 12.12)

L. Biologicheskii fakultet Moskovskogo gosudarstvennogo  
universiteta. Submitted March 25, 1965.

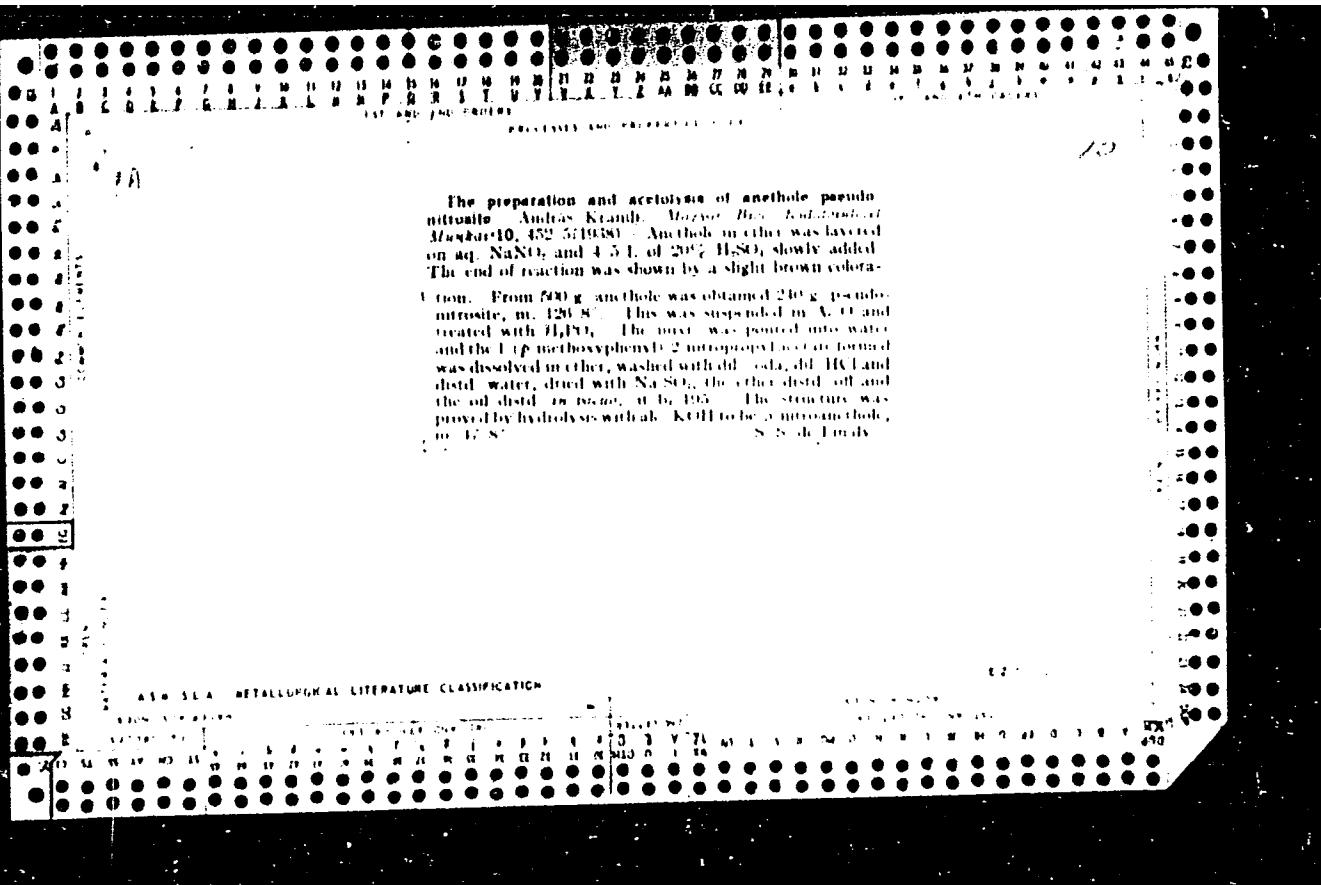
MAREK, N.; SIPOS, M.; STUR, J.K.; ZHARVAS, J.; KRAMLI, A.

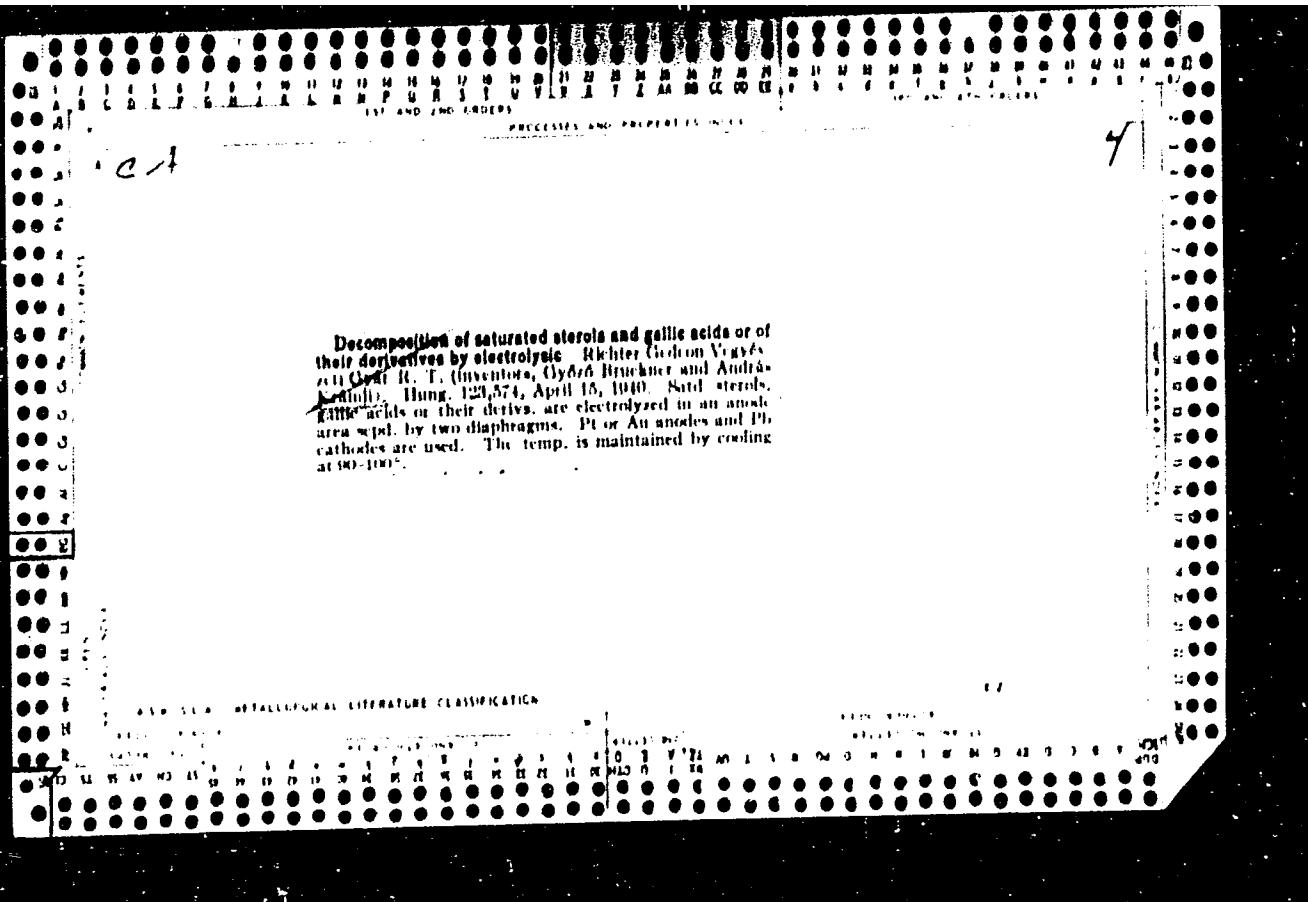
Continuous culturing of algae in artificial illumination. Acta  
biol. acad. sci. Hung. 16 no.1:43-49 '65.

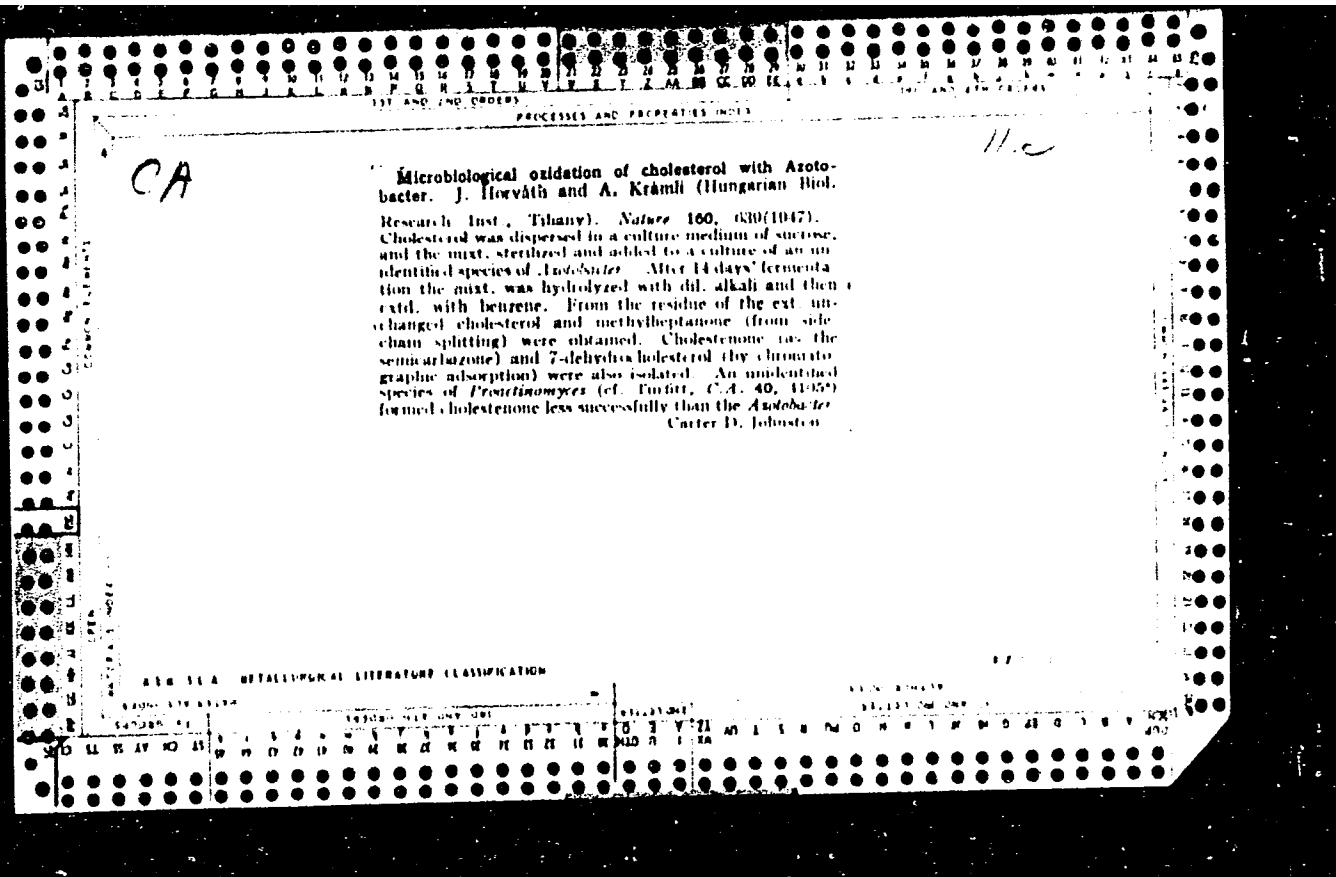
1. Institute of Medical Chemistry, Medical University, Szeged  
(Head: A. Kramli). Submitted July 20, 1964.

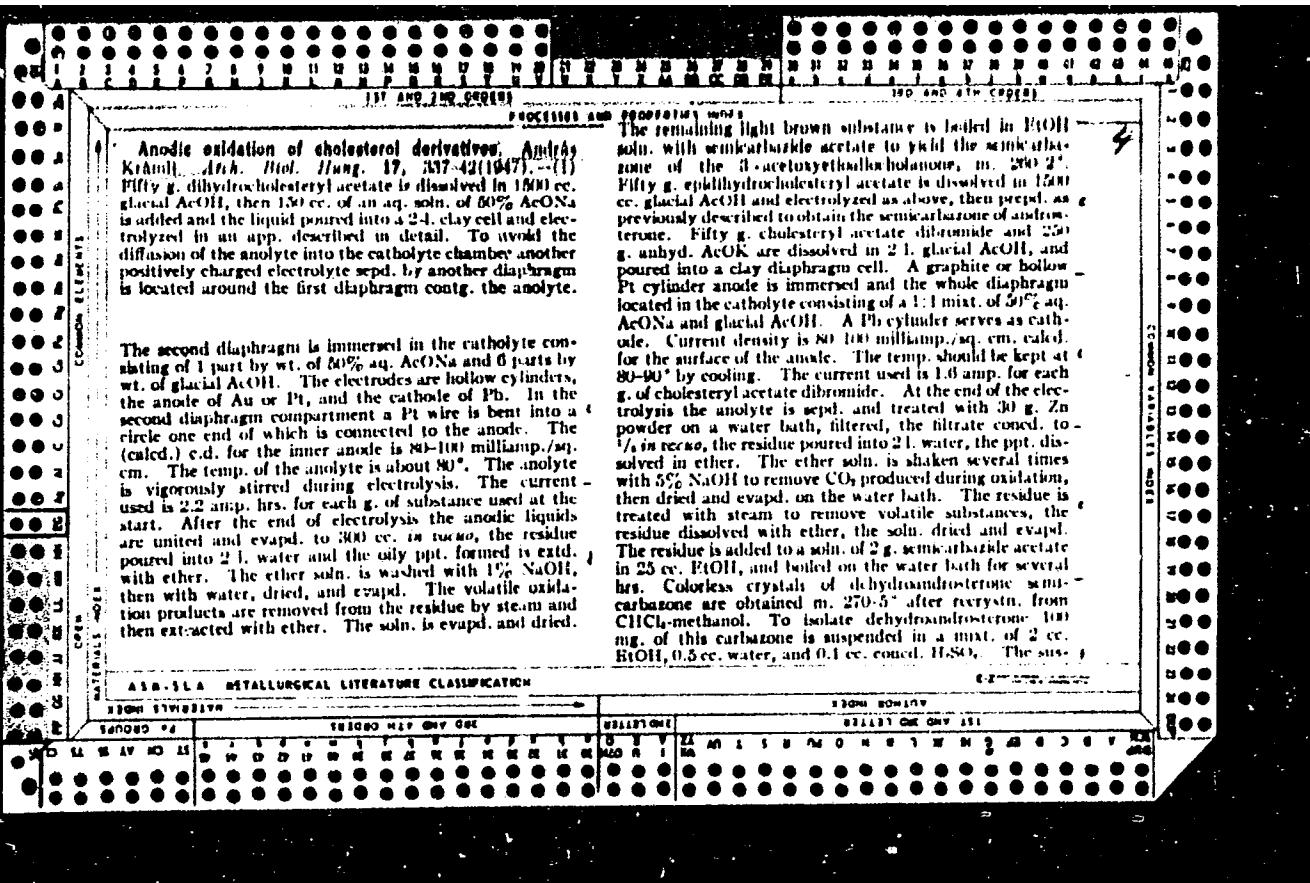


The electrolytic reduction of the aliphatic nitro group  
V. Bruckner, A. Kandl and E. Vinkler. *Acta Lit. Sci.  
Repu. Uste. Hung. Francisco-Josephinae, Sect. Chem.,  
Mineral. Phys.*, 6, 145-50 (1938). A Cu or Pb tube closed  
at its lower end serves as a cathode. It is contained in a  
porous clay cell filled with the catholyte, soln. of the nitro  
compd. in a mixt. of glacial acetic acid, ac. and concd  
HCl. This porous cell is surrounded by the anode (a  
cylindrical Pb sheet or Pt wire) in a beaker filled with the  
anolyte (20% H<sub>2</sub>SO<sub>4</sub>). The amount of anolyte is sufficient  
to maintain the same level in both parts of the app. To  
effect reduction to hydroxylamine deriv., the following  
conditions are proposed: (a) technical Pb or Cu as a cathode,  
(b) room temp. of the catholyte, (c) a c. d. of 0.01-4  
amp. per sq. cm. of cathode surface and (d) a max. of 1.3  
times theoretical value of the current. To reduce to amine  
the conditions are: (a) pure Pb anode, (b) temp. of  
catholyte 50-60°, (c) c. d. 0.07 amp. per sq. cm. of cathode  
surface and (d) 2-2.5 times the theoretical current. The  
reaction product usually is isolated by neutralization of the  
soln. with a satd. aq. soln. of AcONa and evapn. under  
low pressure not over 50° to 0.1 the vol. The exptl. data  
show good yields.  
S. S. de Finny









suspension is boiled on a water bath for 1 hr., neutralized with a 20% soln. of NaOH, 0.5 cc. of the NaOH soln. is added, the mixt. heated for 30 min. on the water bath, filtered hot, and the filtrate dilut. with an equal amount of water. The crystals are filtered, washed with 40% EtOH, dried, and recrystd. from petr. ether b. 65-80° to give silky needles of dehydroandrosterone, m. 118°.

István Füredi

(A)

11 C

The microbiological transformation of sterols. I. The oxidation of cholesterol by Azotobacter. János Horváth and András Krámlík. *Archiv Biol. Hung.* 18, 19-24 (1968); cf. C.A. 62, 16861. 7-oxysterol was isolated from compost. This anaerobic decompd. cholesterol to cholestenone and to 7-dehydrocholesterol in 14 days at 34°. Higher aliphatic aldehydes and ketones could be detd. István Finály

KRAHLI, A. 1948

(Hung. Biol. Res. Inst. Tihany)

"Microbiological Oxidation of Sterols."

Nature, 1948 162/1120 (619)  
No abst. in Exc. Med.

KROMPECHER, I.; KRAMLI, A.; LELKES, G.; VALYI-NAGY, L.; SZABO, S.

Antirachitic effect of egg shell. Acta physiol. hung. 4 Suppl:61-62  
1953. (CLML 25:1)

1. Of the Institute of Biochemistry of Szeged University.

KRAMLI, A

BUNQ.

Effect of heavy metals on respiration and oxidation-reduction potentials of *Streptomyces griseus* cultures. A. Kramli, H. F. Pettko, and P. Kiss (Siegen Univ.), *Acta Microbiol. Acad. Sci. Hung.* 2, 39-49 (1954) (in German).—When cultures were raised on medium lacking trace elements, the oxidation-reduction potential stayed at approx. 300 mv. With 10 γ/ml. Mn or Mn + Fe, the oxidation-reduction potential underwent a max., while the respiration underwent a minimum. Respiration was increased by 20-60 γ/ml. Fe and most strongly by 100 γ/ml. V<sup>4+</sup>, which inhibited streptomycin production. The oxidation-reduction potential was reduced by addn. of V<sup>4+</sup> and relatively unaffected by Zn, Mn, Fe, and vanadate ions, except transiently. It was raised by addn. of metalloid V and Mn, reduced by Cu, and unaffected by Fe, Ni, Co, and Cr. S. W. B., Jr.

KRAMLI, A.; FULAY, G.; LANTOS, J.

Method for isolation of steroid-oxidizing microorganisms. Acta  
microb. hung. 2 no.1-2:145-149 1954.

1. Medizinisch-Chemisches Institut der Universitat Szeged.  
(BACTERIA, metab.  
oxidation of steroids, isolation method)  
(STEROIDS, metab.  
oxidation by bact., isolation method)  
(OXIDATION-REDUCTION  
oxidation of steroids by bact., isolation method)

KRAMER, F.

## H I N G

Production of streptomycin in glass columns. A. Kraml, A. Körber, B. Malenová, M. Nevald, O. Pálloveczky, J. Turya. (U.S. Pat. No. 3,625,737; 1972-01-10; 1964 X in Germany). The apparatus for surface cultures are retained in the Appendix. The apparatus consists of a vertical series of 10 plastic tubes having a glass cylinder and provided with devices for adding media and inoculum and taking samples rapidly and without disturbing the inoculation. It is claimed that this will permit cultures of streptomycin (I) to be conducted on an industrial scale as well as for various investigative procedures. In surface growing cultures, production of I was max. 800-900 units/ml. in a microclimate of air with 0.20 mm. Hg partial pressure of CO<sub>2</sub>. With higher CO<sub>2</sub> partial pressure (0.30 mm. Hg), production of I decreased. Production of I was max. when the oxidation-reduction potential (E<sub>1</sub>) was at its lowest value. In cultures superinfected by bacteriophage, there occurred a slight increase in the reduction potential, which fell when Streptomyces again prevailed. With a high CO<sub>2</sub> content in the air over the culture (0.4 mm. Hg), the bacteriophage did not develop, bacteria grew abundantly, while the production of I was very small or absent.

G. M. Hocking

KLAZS, L., KOMORNIKI, I., MOLNAR, J.

Changes in relax potential of surface cultures of streptomyces griseus effected by infections. In English. p. 23, (ACTA PHARMA, Budapest, Hungary). Vol. 5, No. 1/2, 1954.

(C) Monthly List of East European Acquisitions, (EAA) 12, Vol. 4, No. 5, May 1954, Uncl.

KRAMER, A.

The Streptococcus faecalis strains reduce colonial size  
of Escherichia coli strains in vitro (McDowell)  
Kramer, et al., 1964 (1964) (in English)  
Colonial size units per ml Oxford units of inhibition per ml  
United Kingdom 1964 U.S.A. 1964 U.S.A. 1964  
Resistant strains did not respond (0 units per ml) - S. B.

PETTKO, E.F.,; KISS, P.,; KRAMLI, A.

The effect of heavy metals on the respiration and redox potential  
of streptomyces. Acta microb. hung 3 no.1-2:35-39 1955.

1. Chemisches und Biochemisches Institut der Medizinischen  
Universitat, Szeged.

(STREPTOMYCES

aureofaciens, eff. of heavy metals and on respiration  
& redox)

(METALS, eff.

heavy metals, on resp. & redox potential of  
Streptomyces aureofaciens)

✓ 2235. Effect of penicillin and streptomycin on the redox potential of sensitive and resistant strains of *Staphylococcus aureus*. A. Krámlík, J. K. Stur, and P. Turay. *Acta physiol. Acad. Sci. Hung.*, 1955, 8, 15-24. Parallel continuous determinations of redox potential (RP) and bacterial cell count by a Puifrich nephelometer during growth of penicillin resistant and sensitive *S. aureus* strains were made. The RP of sensitive strains exposed to antibiotics were compared to that of control strains; the RP of resistant strains under identical conditions remained the same. The method is suitable for the rapid determination of the degree of resistance and also for the detection of minute quantities of antibiotics. (Hungarian)

A. B. L. BEZNÁK

3

Krámli, A.

Effect of metals on respiration and oxidation-reduction potential of *Streptomyces aureofaciens*. K. P. Petrikó, P. Kiss, and A. Krámli (Med. Univ., Szeged). *Acta Microbiol. Acad. Sci. Hung.* 3, 30-4 (1950) (in German).—Respiration of a 3-day-old mycelium of *S. aureofaciens* increased by the addition of 00 γ Fe or Mn/ml., decreased by the addition of 20-60 γ Cu, Cr, Pb, or Zn/ml., and was completely inhibited by 60 γ Cu/ml., while Al, Co, Mg, Mo, Ni, Si, and V were without effect. Oxidation-reduction potentials increased in the presence of Cd, Cu, Fe, and Pb, decreased in the presence of V and Zn, and were unaffected by Al, Co, Mn, Mo, Ni, and Si. Fe and Cu acted as oxidation-reduction buffers. Aluminum fermentors were recommended for the large-scale production of chlortetracycline. Cf. C.A. 51, 1774c.

KRALI, A.; PETTKO, F.; SIPOS, M.

Changes in redox potential of bacterial culture media under  
the influence of UV and X rays. p. 21. BIOLOGIAI KÖZLEMÉNYEK  
(Magyar Biológiai Társaság. Általános Biológiai Szakosztály)  
Budapest. Vol. 4, no. 1, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 5, no. 12, December 1956.

KRAMLI, A.

Effect of penicillin and streptomycin on the oxidation-reduction potential of sensitive and resistant strains of *Micacoccus pyogenes* var. *aureus*. A. Krámlí, J. K. Star, and P. Tursy (Univ. Med. School, Szeged). *Acta Physiol. Acad. Sci. Hung.* 8, 15-24 (1955) (in English); cf. *C.A.* 49, 3302g.—A satd. calomel electrode oppositely connected with a smooth Pt or Au electrode was used for detg. the oxidation-reduction pot initial (I). The developing I was measured by a Mettler titrscope. The electrodes were immersed deeply into the culture so that I was detd. under practically anaerobic conditions. The I of a sensitive strain exposed to bacteriostatic concentrations of penicillin (II) or streptomycin showed an initial decline similar to untreated cultures (III). Later, in contrast to III whose I continued to decline, the I of the antibiotic containing cultures began to rise. Changes in I with time in a resistant strain exposed to II practically paralleled I changes in III if the concn. of II didn't exceed the limit of the strain's resistance.

L. H. Murchel

(2)

KARL W. A.

Effect of oxidation-reduction potential on the metabolism of microorganisms. III. Investigation of oxidation-reduction potentials in *Escherichia coli* by means of potassium ferricyanide. S. Hasegawa, K. Yamada, T. Kurokawa, and T. Kondo. *Jpn J. Microbiol.* 10: 113-119 (1966). The authors investigated the effect of potassium ferricyanide on the metabolism of *E. coli*. The reduction of the redox enzyme of the tricarboxylic acid cycle, the cytochrome  $c_1$ , leads through abolition of the bond owing to spontaneous cyclic reduction and increase of the initially observed oxidation-reduction potential. Cytochrome  $c_1$  showed about a prolonged increase in the oxidation-reduction potential in the yeast suspensions. In the presence of the redox substance, the cell did not develop an oxidation-reduction buffer effect. III. Effect of thiophenoic acid on ergosterol production in yeast cultures. A. Kishimoto, T. Kondo, and T. Hidai. *Jpn J. Microbiol.* 10: 103-109 (1966). When thioether considerably the oxidation-reduction potential of cultures, thereby diminished the yield of ergosterol. IV. Effect of thiophenoic acid on the growth of shaken cultures of *Bremotrichum asbyrinum*. A. Kishimoto and A. Suzuki. *Jpn J. Microbiol.* 10: 207-212 (1966). Treatment of productive cultures of *B. asbyrinum* with thiophenoic acid resulted in a temporary prolongation of the growth period, increase of the oxidation-reduction potential curves and thereby an increased production of ergosterol. — William Brinker

KRAMLI, A.; LANTOS, J.

Action of redox systems on the metabolism of microorganisms. III.  
Effect of thioglycolic acid on ergosterol production in yeast cultures.  
In German. p. 193. ACTA BIOLOGICA. (Magyar Tudomanyos Akademia)  
Budapest. Vol. 6, no. 3/4, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 5, No. 12, December 1956.

KRAMLI, A.; SZABO, A.

Action of redox systems on the metabolism of microorganisms. IV.  
The change of riboflavin production in shaken cultures of  
Eremothecium ashbyii. In German. p. 197. ACTA BIOLOGICA.  
(Magyar Tudomanyos Akademia) Budapest. Vol. 6, no. 3/4, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress,  
Vol. 5, No. 12, December 1956.

KRAMER / KRAMER A

Changes in the metabolism of *Escherichia coli* grown on irradiated lactose medium. By Katalin H. Petrik and (1969) - *Cancer Research*, Volume 17, p. 237  
cells of *Escherichia coli* were inoculated into cultures containing 10% irradiated lactose. Growth of the culture only started after complete reduction of the original reducing capacity, which had increased on the irradiation. It therefore the growth of the cells and the oxidation-reduction potential of the cultures corresponded to that of the control. *β*-galactosidase production, however, decreased significantly.

A. E. Tiede

KRAMLI, A.

HUNGARY/Microbiology - General Microbiology

F-1

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81410

Author : Kramli, A. Pettko, E., Turay, P.

Inst : -

Title : Effect of Thioglycollic Acid on the Metabolism  
of Yeast Cells.

Orig Pub: Biol. kozl., 1957, 5, No. 1, 45-49

Abstract: The fermenting power and carboxylase activity  
of yeasts is increased by thioglycollic acid  
under aerobic conditions, while the dehydrase  
activity is unchanged. The quantity of ace-  
taldehyde, which represents an intermediary  
product in the fermentation process, is  
increased in relation to the quantity of alcohol  
formed. It is assumed that the acetaldehyde  
remaining after oxidation into acetic acid

Card 1/2

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HUNGARY/Microbiology - General Microbiology

F-1

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81410

enters the lipoid metabolism of cells and for  
this reason, in the presence of thioglycollic  
acid, the synthesis of ergosterol by yeasts is  
increased.

Card 2/2

KRAMLI, A.

HUNGARY/Microbiology. General Microbiology. Physiology f-1  
and Biochemistry

Abs Jour : Ref Zhur - Biol., No 14, 1958, № 62266

Author : Karpatic Stur Judit, Kramli Andres

Inst : -  
Title : The Connection Between the Formation of Sorbose  
and the Oxidation-reduction Potential in Cul-  
tures of Acetobacter Suboxydans.

Orig Pub : Biol. kzol., 1957, 5, № 1, 51-59

Abstract : The maximum number of cells in cultures of A.  
suboxydans, grown in flasks on a shaker or in  
metallic fermenters, coincided with a minimum  
value of the oxidation-reduction potential (ORP).  
After that, the value of ORP began to increase.  
The accumulation of sorbose continued after the  
rise of ORP. This is evidence that the forma-  
tion of sorbose proceeds even in old and autoly-  
zing cultures. Variation of the normal progress

Card : 1/2

HUNGARY/Microbiology. General Microbiology. Physiology F-1  
and Biochemistry

Abs Jour : Ref Zhur - Biol., No 14, 1953, No 62266

of the QRP curve implies a contamination of  
the culture and can be used for its rapid de-  
tection. -- From the authors' summary.

Card : 2/2

KRAMLI, Andras)

Formation of riboflavin and ergosterol by the use of prolonged  
fermentation methods. Vitaminy no.4:154-158 '50.

(MIRA 12:9)

1. Khimicheskiy i biokhimicheskiy institut Meditsinskogo  
universiteta, Seged, Vengriya.  
(RIBOFLAVIN) (ERGOSTEROL) (FERMENTATION)  
SZEGED, HUNGARY.

KROMPECHER, Istvan; KRAMLI, Andras; VALYI-NAGY, Tibor

Significance of eggshell in the prevention and cure of rachitis. Elelm ipar II no.11/12:267-269 D'57.

1. Anatomiai Intezet, Debrecen (for Krompecher). 2. Orvosi Kemial Intezet, Szeged (for Kramli). 3. Gyogyszertani Intezet, Debrecen (for Valyi-Nagy).

L 7863-66 EWT(1)/FS(v)-3

DD

ACC NR: AT5028036

SOURCE CODE: HU/2501/65/016/001/0043/0049

AUTHOR: Marek, Nandor (Szeged); Sipos, Maria (Szeged); Stur, Judit k. (Szeged);  
Szarvas, Janos (Szeged); Kramli, A. (Head, Szeged)

ORG: Institute of Medical Chemistry, Medical University, Szeged

TITLE: Continuous culturing of algae in artificial illumination

SOURCE: Academia scientiarum hungaricae. Acta biologica, v. 16, no. 1, 1965, 43-49

TOPIC TAGS: photosynthesis, algae, chlorella

ABSTRACT: A method for continuous cultivation of algae is described; this method can produce algae in sufficient quantities to inoculate larger culturing units. A diagram of the apparatus, which is based on the light-utilizing properties of the algae (Chlorella in these experiments) and on the theoretical principles of continuous cultivation, is given in the original article. Experiments showed that this system is self-regulatory in a certain light-intensity range: its productivity per unit volume of suspension remains constant at a rate of inflow of the medium between certain limits. The computed cell concentration values at different renewal periods must be taken as limits since the values obtained deviate approximately 10% from theoretical values. Orig. art. has: 1 figure and 12 formulas. [JS]

SUB CODE: LS/ SUBM DATE: 20Jul64/ OTH REF: 002/ ATD PRESS: 4147

Card 1/1

31  
B71

L 23896-66 SCTB DD

ACC NR: AT6011827

SOURCE CODE: HU/2501/66/016/004/0319/0325

AUTHOR: Marek, Nandor (Szeged); Sipos, Maria (Szeged); Stur, Judit K. (Szeged);  
Szarvas, Janos (Szeged); Kramli, Andras (Szeged)  
ORG: Institute of Medical Chemistry, Medical University, Szeged/ headed  
by A. Kramli/

TITLE: Studies on the redox potential in algal culturesSOURCE: Academia scientiarum hungaricae. Acta biologica, v. 16, no.4,  
1966, 319-325

TOPIC TAGS: algae, redox potential, oxygen tension, plant growth

ABSTRACT: Redox potential (RP) measurements were carried out in algal cultures to investigate the influence of the daily periodicity of light and darkness on changes in RP values and to establish the relationship between RP and growth curves. It was found that RP values are subject to regular daily changes, and are higher and lower in light and darkness, respectively. The difference between the maximum and minimum values varies greatly depending on whether the cultures are grown in inorganic media or in those containing organic hydrocarbons. It is assumed that this might be caused by differing oxygen tensions due to difference in photosynthetic oxygen production in the various media. The regular relationship between daily RP maximum values and growth rate

Card 1/2

36  
B+1

2

L 23896-66

ACC NR: AT6011827

of cultures is also discussed. Orig. art. has: 4 figures [Author's  
abstract] [KS]

SUB CODE: 06/ SUBM DATE: 23Apr65/ ORIG REF: 004/ OTH REF: 006/

Card 2/2 BK

(4)

RE BARY

RU/2501/66/016/004/0319/032

AUTHOR: Karek, Nandor (Szeged); Sipos, Maria (Szeged); Stur, Judit K. (Szeged);  
Szarvas, Janos (Szeged); Kramli, Andras (Szeged)  
ORG: Institute of Medical Chemistry, Medical University, Szeged/Hungary  
by A. Kramli/

TITLE: Studies on the redox potential in algal cultures

SOURCE: Academia scientiarum hungaricae. Acta biologica, v. 16, no. 1, 1966, 319-325

TOPIC TAGS: algae, redox potential, oxygen tension, plant growth

ABSTRACT: Redox potential (RP) measurements were carried out in algal cultures to investigate the influence of the daily periodicity of light and dark, i.e. on changes in RP values and to establish the relationship between RP and growth curves. It was found that RP values are subject to regular daily changes, and are higher and lower in light and darkness, respectively. The difference between the maximum and minimum values varies greatly depending on whether the cultures are grown in inorganic media or in those containing organic hydrocarbons. It is assumed that this might be caused by differing oxygen tensions due to difference in photosynthetic oxygen production in the various media. The regular relationship between daily RP maximum values and growth

of cultures is also discussed. Orig. art. has: 4 figures [Author's  
abstract]

2/2

- 184 -

KOULA, Vaclav, dr. inz.; KRAMLOVA, Marie, promovany chemik

Determination of secondary effects of esters and salts of substituted phenoxyacetic acids applied as cold aerosols on the content of reducing sugars and saccharose, on the activity of some enzymes, and on the content of biogenic and trace elements of weeds and cultivated plants. Rost výroba 10 no. 4:451-466 Ap '64.

1. Central Research Institute of Plant Production, Department of Plant Protection, Ruzyně.

KRAMI, A. S.

KRAMI, A. S. "A graphic calculation on nine lime-burning furnaces using partial gas firing", Vest. strukt. materialy, 1946, Issue 6, p. 1-10.

SO: U-3042, 11 March '63, (L'etepis 'Zhurnal 'nykh Statey, No.7 1949).

KRAMM, A.S.; SHPAYER, A.L., red.; GARNUKHINA, L.A., tekhn. red.

[Lime production] Proizvodstvo izvesti. Izd. 2., dgo. Moskva,  
Gos.izd-vo lit-ry po stroit. materialam, 1957. 84 p. (MIRA 11:11)  
(Lime)

KRAMM, Aleksandr Sergeyevich; NIKOLAYEVA, N.M., red.; GARNUKHINA, L.A.,  
tekhn. red.

[Improving of lime firing in mine overfill furnaces] Intensifikatsiya  
obzhiga izvesti v shakhtnykh peresypyvnykh pechakh. Moskva, Gos. izd-  
vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 67 p.  
(Limekilns) (MIRA 11:5)

~~KRAVOL~~ S.  
Efficient preparing of raw material. Stroim. mat. 4 no. 10:11-12  
0 '58. (MIRA 11:11)  
(Lime)

BERKH, Ye.M., kand.ekon.nauk; KORNYUSHINA, A.P., inzh.; KRAMM, A.S., inzh.;  
BARLYAYEVA, M.S., inzh.; KHEYFETS, F.N., inzh.

Potentials for the growth of labor productivity in the lime  
industry. Sbor. trud. ROSNIIMS no.20:119-125 '61. (MIRA 16:1)  
(Lime industry—Labor productivity)

KRAMM, T.P.

Gypsum in iron ore sediments of the Kerch Peninsula. Trudy  
Inst.min.resur. AN URSR no.2:28-36 '60. (MIRA 15:5)  
(Kerch Peninsula--Gypsum)

YURK, Yu.Yu.; SHNYUKOV, Ye.F. [Shniukov, IU.F.]; KRAMM, T.P.

New finds of iron sulfate in the Kerch and Taman' iron ore deposits.  
Dop.AN URSR no.9:1271-1276 '60. (MIRA 13:10)

1. Institut mineral'nykh resursov AN USSR. Predstavлено akademikom  
AN USSR N.P.Semenenko.  
(Crimea--Iron sulfate)

KRAMMER, Gergely

Evaluation of a multiple definite integral by computer. Koz fiz  
kozl MTA 10 no.2:153-157 '62.

1. Szilardtestfizikai Laboratorium.

KRAMMER, Gergely

An extreme value property of the regular tetrahedron. Mat  
lapok 12 no.1/2:54-58 '61

KRAMMER, Ye.V.

DERKACH, V.S.; BELEYA, O.S.; BULATSEL', A.M.; KVYAT, K.M.; TURMAN, Ye.P.;  
KRAMMER, Ye.V.; ZVYAGINTSEVA, A.M.

Effectiveness of combined antibiotic therapy for chronic dysentery.  
Zhur.mikrobiol.epid.i immun. no.3:54-59 Mr '55. (MLRA 8:7)

1. Iz mikrobiologicheskogo otdela (zav. prof. V.S.Derkach) Khar'-  
kovskogo instituta vaktain i syvorotok (dir. kandidat biologiche-  
skikh nauk G.P.Cherkas) i profil'nykh yasley Kar'kova.

(DYSENTERY, BACILLARY, therapy,  
antibiotics, combined ther.)  
(ANTIBIOTICS, therapy,  
dysentery, combined ther.)

KRAMNIK, I., starshiy inzh.

Interfactory school for metal-cutting tool specialists. NTO 4  
no.1:29 Ja '62. (MIRA 15:1)

1. TSentral'noye byuro tekhnicheskoy informatsii Kuybyshevskogo  
sovnarkhoza.  
(Metal cutting tools)

KRAMNIK, I.I.

Seminar on the use of vibratory bunkers. Mashinostroyitel' no.1:  
44 Ja '62. (MIRA 15:1)  
(Feed mechanisms)

PIKMAN, I.Ya., inzh. (Khar'kov); KRAMNIK, I.N., inzh. (Khar'kov)

Repair shops with high standards of production. Zhel. dor. transp.  
47 no.9:57-61 S '65. (MIRA 18:9)

KRAMNIK, N., metodist

Colored asphalt concrete. Inform. biul. VDNKh no.10:16-17  
O '64 (MIRA 18:1)

1. Pavil'on "Transportnoye stroitel'stvo" na Vystavke dostizheniy narodnogo khozyaystva SSSR.

KRAMNIK, T. A.

"Intensification of the Sintering of Krivoy Rog Ores by Small Additions of Burnt Lime." Cand Tech Sci, Dnepropetrovsk Order of Labor Red Banner Metallurgical Inst imeni I. V. Stalin, Min Higher Education USSR, Dnepropetrovsk, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

KRAMNIK, T.A., kandidat tekhnicheskikh nauk; NECHESOVA, N.I., inzhener.

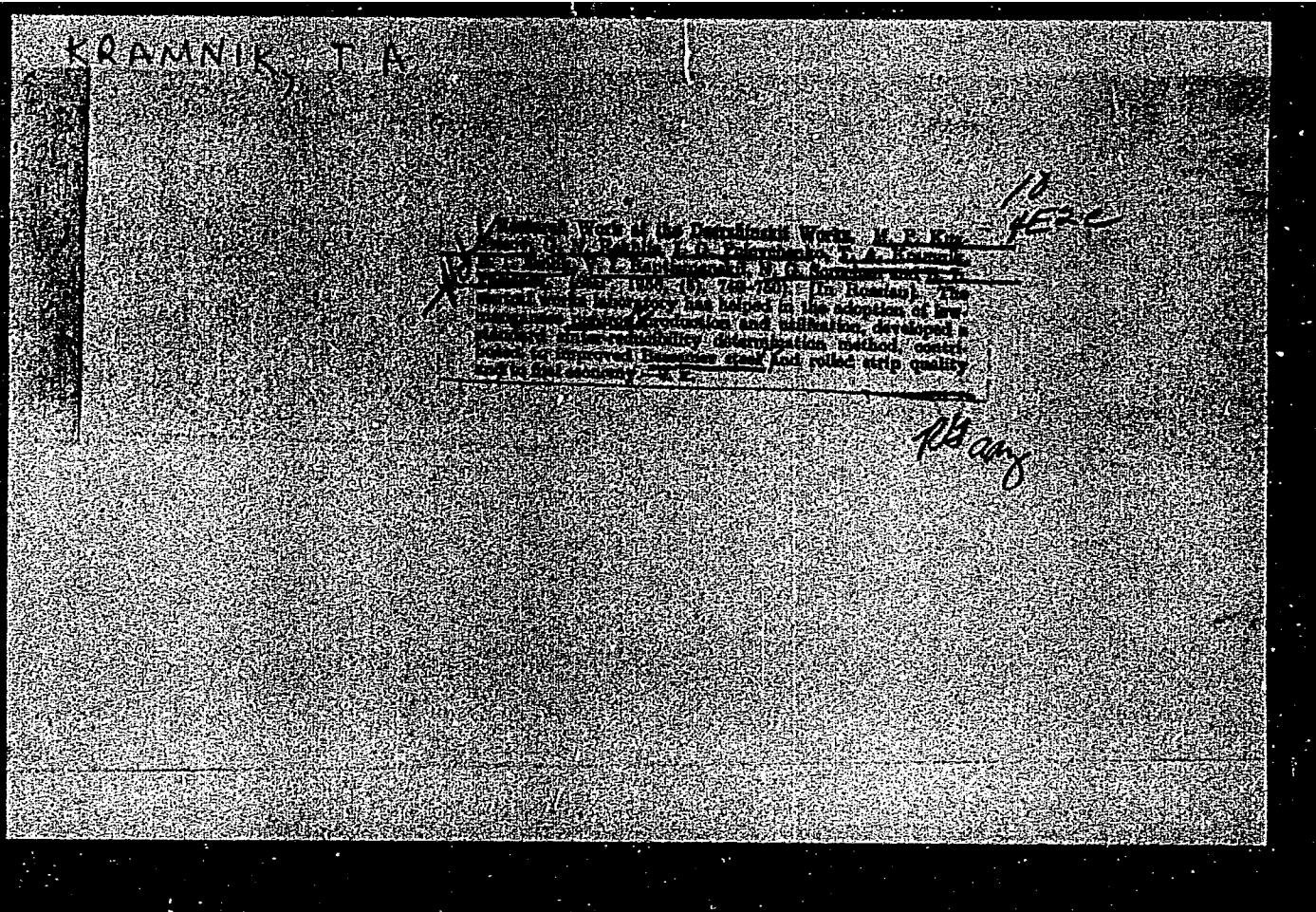
Conditions for increasing the rate of sintering for Bessemer and basic open-hearth manganese agglomerates. Stal' 15 no.10:880-886 O '55.

1. Zavod imeni Dzerzhinskogo.

(Dneprodzerzhinsk--Open hearth process)  
(Dneprodzerzhinsk--Bessemer process)

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CIA-RDP86-00513R000826020019-3"

KRAMNIK, T.A., kandidat tekhnicheskikh nauk.; SOROKIN, A.A., inzhener.

Experiments in burning limestone in the sintering plant. Stal' 16 no.9:  
774-776 S '56. (MIRA 9:11)

1. Zavod imeni Dzerzhinskogo.  
(Blast furnaces) (Limestone)

KRAMNIK, T. A.

SOV/137-58-8-16378

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 21 (USSR)

AUTHOR: Kramnik, T.A.

TITLE: The Industrial Method of Determination of the Reducibility of an Agglomerate (Zavodskoy sposob opredeleniya vosstanovimosti aglomerata)

PERIODICAL: V sb.: Domennoye proizvodstvo. Moscow, Metallurgizdat, 1958, pp 16-25

ABSTRACT: A method for the determination of the relative reducibility of an agglomerate with a 0.15% precision in a current of electrolytic H<sub>2</sub> (99.7% H<sub>2</sub>) has been developed and successfully applied at the im. Dzerzhinskiy metallurgical plant. The boat with the weighed test sample, placed in the reaction tube, is weighed after 10 min (during the preheating of the test sample the furnace is blown through with N<sub>2</sub>). The determination lasts 30-40 min. The optimal speed of H<sub>2</sub> (6.2-3.5 cm/sec), temperature of the test (700°C), weight of the test sample, and grain size are established.

Card 1/1

1. Ores--Reduction    2. Hydrogen--Performance    3. Iron  
(Metallurgy)--Physical properties                                  N. L.

SOV/137-58-8-16282

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 7 (USSR)

AUTHOR: Kramnik, T.A.

TITLE: Sintering of Fluxed Sinter From Krivoy Rog Ores (Spekaniye oflyusovannogo aglomerata iz krivorozhskikh rud)

PERIODICAL: V sb.: Domennoye proiz-vo Moscow, Metallurgizdat, 1958, pp 44-59

ABSTRACT: On the conversion of the im. Dzerzhinskiy Plant to the sintering of fluxed Bessemer and open-hearth sinter (S) of 0.5-0.9 basicity from Krivoy Rog ores, the output of the sintering machines rose by 7.7%, the blast-furnace volume utilization factor improved, coke consumption dropped, the reducibility of the S improved, the FeO contents thereof dropped sharply (from 21 to 10%), the barrel-mill test-index reading was poorer (up to 25.8% instead of 22.4%), the Fe contents diminished from 60.33 to 55.91% of the unit dry granular weight of the charge, and the volumetric weight of the S diminished. No artificial bed is used in the sintering. The output rate of the pallet belt rose only when Bessemer S was sintered (on the average from 78.6 to 87.9 t/belt-hour) and decreased slightly

Card 1/2

SOV/137-58-8-16282

Sintering of Fluxed Sinter From Krivoy Rog Ores

in the sintering of manganeseiferous open-hearth steel owing to the impairment of the charge composition. When the basicity of the steel was >1.0, its mechanical properties are noticeably impaired (the friability of the steel increased sharply when large additions of limestone were made). To improve the barrel-mill test index it is necessary to add a little burnt lime to the steel mix, to grind the limestone more finely, and to mix the charge well. When the basicity rose > 1.0, the increase in sintering rate slowed down, the fuel consumption was increased, and the yield of good product and the output rate of the pallet belt declined.

1. Ores--Sintering    2. Sintered ores--Properties    3. Sintering furnaces  
--Performance

N.L.

Card 2/2

YEFIMENKO, G.G., inzh.; VOYTANIK, S.T., inzh.; YEFIMOV, S.P., inzh.; MACHKOVSKIY, A.I., inzh.; RUDKOV, A.K., inzh.; RUDKOVSKIY, G.I., inzh.; Prinimali uchastiye: KOVALEV, D.A.; GOTOVTSOV, A.A.; VASIL'YEV, G.S.; ZEMLYANOV, A.A.; KUKUSHKIN, S.N.; MATYNA, M.G.; LOVCHANOVSKIY, V.A.; KRAMNIK, T.A.; NECHESOVA, N.I.; MARTYNNENKO, V.A.; KURAKSIN, D.I.; LETYAGIN, N.L.

Intensifying the sintering process by the use of a special charge wetting device. Stal' 23 no.12:1061-1064 D '63. (MIRA 17:2)

1. Dnepropetrovskiy metallurgicheskiy institut, zavod im. Dzerzhinskogo i Yuzhnnyy gornoobogatitel'nyy kombinat. 2. Dnepropetrovskiy metallurgicheskiy institut (for Kovalev, Gotovtsev, Vasil'yev, Zemlyanoy, Kukushkin). 3. Zavod im. Dzerzhinskogo (for Matyna, Lovchanskiy, Kramnik, Nechesova). 4. Yuzhnnyy gornoobogatitel'nyy kombinat (for Martynenko, Kuraksin, Letyagin).

KRAMNIK, V.Yu., inzhener.

Data from investigation of the sintering of oxidized nickel ores.  
TSvet. met. 26 no.2:54-57 Mr-Ap '53. (MLRA 10:9)  
(Nickel ores)

KRAMNIK, V.Yu.

KRAMNIK, V.Yu.

Further intensification of blast-furnace smelting. TSvet.met. 27  
no.6:30-35 N-D '54. (MIRA 10:10)  
(Smelting) (Blast furnaces)

KRAMNIK, V.Yu.

Smelting ilmenite concentrates for the preparation of rich  
titanium slag. TSvet.met. 33 no.5:49-56 My '60.  
(MIRA 13:7)

1. Dneprovskiy titano-magniyevyy zavod.  
(Ilmenite) (Slag)

S/520/C1/000/005/010/010  
D040/B113

AUTHORS: Krasnikh, V.Yu., Gant, S.Yu., Garba, L.S., and Tsvitkov, V.I.

TITLE: Development and application of a method of titanium tetrachloride extraction from chloride pulp

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i ego splavy, no. 5, Moscow, 1961. Metallurgiya i khimiya titana, 267-272

TEXT: A brief description is given of experiments which resulted in a new and better method of  $TiCl_4$  extraction from pulp obtained in the chlorination of titanium ore being found. The only method used until recently was hydrolysis with the formation of hydrochloric-acidous hydrogel from which  $TiCl_4$  precipitated in the form of metatitanic acid-pitch that had to be dried and again melted in furnaces, so that ready  $TiCl_4$  was being turned into raw material which had to be further reprocessed. The new method, developed by research workers, including the authors, is based on the property of molten mass of chlorides to demix and separate into two layers

Card 1/3

Development and application ...

S/598/61/000/005/010/010  
D040/D113

at relatively high temperature. A bath of molten NaCl, or any chlorides of alkali metals or alkaline-earth metals may be used for producing a chloride bath in the furnace, and the TiCl<sub>4</sub> pulp, containing chlorides of Al, Fe, Mg, etc., is charged on the top of the chloride bath. A mass of aluminum chlorides and trivalent iron and sodium with a low melting point separates and rises from the bottom portion of the furnace and metal chlorides with a melting point above 500°C sink into the bottom layer. The difference in the top and bottom layer temperature promotes mixing and intensifies the reaction. A common electric shaft furnace, 3100 mm in diameter, was used, though other furnaces may be used, provided they have a heated lower zone. The furnace was fitted with an air-tight charging hopper with a screw feeder for pulp, and another hopper for NaCl, and was provided with a tap hole at the top, in addition to the usual bottom tap hole. The upper melt layer has to be tamped once daily through the top hole. The space between the furnace electrodes is filled with a carbon packing which serves as an electric resistor, providing heat and maintaining high temperature. The

Card 2/3

Development and application ...

S/598/61/000/005/010/010  
D040/D113

product is tapped into conical steel containers and is removed from them without difficulty. A fluid chloride bath is maintained permanently in the furnace above the carbon packing, and pulp is loaded onto the top of it. Pulp is brought in containers from all chlorination furnaces and from the  $TiCl_4$  purifying section, and poured into the charging hopper. The method has been tested and introduced industrially. The obtained  $TiCl_4$  contains 0.01-0.046% Fe and 0.59-0.218% Al. The new method increased the  $TiCl_4$  output by 5%.

Card 3/3

S/137/62/000/006/044/163  
A006/A101

AUTHORS: Kramnik, V. Yu., Tsvetkov, V. I., Misheneva, Ye. V.

TITLE: Experimental tests of a centrifuge and ceramic filters for the purification of commercial titanium tetrachloride

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 15, abstract 6G110  
(In collection: "Titan i yego splavy", no. 5, Moscow, AN SSSR,  
1961, 273 - 278)

TEXT: Tests were made with new equipment, the AOF-600 (AOF-600) centrifuge and ceramic filters, intended for the purification of commercial  $TiCl_4$ . As a result of the tests the given centrifuge design was found to be unsuitable for extended operation. A series of other deficiencies was also noted. The ceramic filters showed 18 - 38% porosity. They were tested in the shops. The following results were obtained: 1. The average pulp filtration rate is 600 kg/hour. 2. Optimum filtration time between the separations of the precipitate is 30 min. 3. The filtrate is transparent. 4. The precipitate contains 450 - 760 g/kg of pulp. 5. The filtering capacity of a ceramic filter is fully restored by  $N_2$  blast.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 1/1

3/137/62/000/006/034/163  
A006/A101

AUTHORS: Lukashenko, E. Ye., Kramnik, V. Yu., Garmata, V. A., Sergiyenko, S.N.

TITLE: Development and assimilation of magnesium-thermal reduction of titanium tetrachloride in retorts without an inserted reaction beaker

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 14, abstract 6G100  
(In collection: "Titan i yego splavy", no. 6, Moscow, AN SSSR, 1961,  
23 - 26)

TEXT: Industrial experiments of reducing and vacuum-separating  $TiCl_4$  in retorts without beakers make it possible 1) to raise the coefficient of useful utilization of the reactor volume from 35 - 40 to 50 - 60%, and the cyclic yield of Ti-sponge by 50 - 60%; 2) to raise the hourly output of reduction and separation furnaces by 30 - 50%; 3) to raise the labor efficiency of the main production staff by 30% in this conversion department. Moreover, apparatus without beakers assure the production of high-quality Ti-sponge.

[Abstracter's note: Complete translation]

G. Svoitseva

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D217/D303

AUTHORS: Kramnik, V.Yu., and Fal'kevich, E.S.

TITLE: Experiments on the use of titanium articles in aggressive media

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 6, 1961. Metallotermiya i elektrokhimiya titana, 237 - 239

TEXT: The corrosion resistance of Ti and some of its alloys in aggressive media, mainly HCl solutions was tested. For this purpose, pump turbines, ventilator rotors, pulp mixers and a drainage gutter grate were made. The pump turbines used normally work in HCl media containing 20 - 200 and 5 - 10 g/l HCl. The titanium turbine did not exhibit any signs of corrosion after working intermittently for 153 days. The ventilators with titanium rotors, after working constantly for 6 months in a room of high HCl vapor concentration, did not suffer a decrease in thickness of the rotor blades, whereas rotors made from steel 3 had reached the end of

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